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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/526,249

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Jean-Luc Girardet

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10/15/2009

WILSON, SONSINI, GOODRICH & ROSATI
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EXAMINER

FRAZIER, BARBARA S

ART UNIT

PAPER NUMBER

1611

MAIL DATE

DELIVERY MODE

10/15/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/526,249	Applicant(s) GIRARDET ET AL.	
	Examiner BARBARA FRAZIER	Art Unit 1611	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 22, 43-46 and 48-52 is/are pending in the application.
- 4a) Of the above claim(s) 22 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 52 is/are allowed.
- 6) ☒ Claim(s) 43-46 and 48-51 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>5/13/09</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of Claims

1. Claims 22, 43-46, and 48-52 are pending in this application.
2. Claim 22 remains withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/9/08.
3. Claims 43-46 and 48-52 are examined.

Election/Restrictions

4. The Examiner notes that Applicant's comments regarding Election/Restriction (page 6 of Applicant's remarks filed 6/17/09) are not directed to the instant application.

Priority

5. The later-filed application must be an application for a patent for an invention which is also disclosed in the prior application (the parent or original nonprovisional application or provisional application). The disclosure of the invention in the parent application and in the later-filed application must be sufficient to comply with the requirements of the first paragraph of 35 U.S.C. 112. See *Transco Products, Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994).

The disclosure of the prior-filed application, Application No. PCT/US02/26816, fails to provide adequate support or enablement in the manner provided by the first

paragraph of 35 U.S.C. 112 for one or more claims of this application. The prior-filed application does not disclose the full range of compounds of the claimed invention, including compounds of claim 49 of the claimed invention, such as N-(2-chloro-4-sulfamoyl-phenyl)-2-[4-(4,7-dimethyl-naphthalen-1-yl)-5-methyl-4H-[1,2,4]triazol-3-ylsulfanyl]-acetamide. The prior-filed application generically discloses compounds having the structure HET-L-C(Y)NR₁R₂ wherein R₂ is aryl (page 2), and compounds having a structure according to formula (A) (for example, see page 11). While the structure of formula (A) corresponds to the structure of formula (A) in Applicant's claims, the R₅ substituent in the structure of formula (A) in the prior-filed application may only be lower alkyl or hydrogen (see page 11), and not other substituents listed in claim 49 of the claimed invention, including S-alkyl, CF₃, heterocycle, NR'R'', S(O)2R', or C(O)R', such as a SO₂NH₂ group. Additionally, the definition of "substituted" in the prior-filed application (page 6, lines 17-22) does not include all of the named substituents in the claimed invention, such as a SO₂NH₂ group. A sulfamido group is only mentioned as an optional substituent of a heteroatom within a heterocyclic ring (see page 6, lines 6-16). Accordingly, the prior-filed application does not provide support for the claimed invention.

Claim Rejections - 35 USC § 102

6. The rejection of claims 43, 50, and 51 under 35 U.S.C. 102(b) as being anticipated by Shrimali et al (J. Indian Chem. Soc., 68(8), pp. 466-9, 1991) is withdrawn in view of Applicant's amendment to claim 43.

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7. The rejection of claims 43-46 and 48-51 under 35 U.S.C. 102(e) as being anticipated by Simoneau et al (US 2005/0054639) is withdrawn in view of Applicant's amendment to claims 43 and 46.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

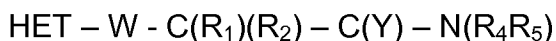
10. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to

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consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

11. Claims 43-46 and 48-51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Simoneau et al (US 2005/0054639).

The claimed invention is drawn to triazole and imidazole-substituted compounds according to Formula (VI)



as defined in the claims (see claims 43-45 and 50-51); also claimed are compounds of formula (A) or (B) comprising thioacetamides having a disubstituted imidazole or triazole ring, according to claim 46 (see claims 46 and 48-49).

Simoneau et al teach non-nucleoside reverse transcriptase inhibitors of the formula $\text{Ar}^1\text{-X-W-Ar}^2$, having inhibitory activity against strains of HIV (abstract). According to one aspect, preferred compounds are wherein Ar^1 is a triazole substituted with methyl and naphthyl; X is S; W is $\text{CH}_2\text{C}(\text{O})\text{NH}$; and Ar^2 is phenyl ortho-substituted with nitro (paragraph 264), or Ar^2 is most preferably selected from substituents consisting of phenyl substituted in the ortho and para positions (paragraph 292). The naphthyl may be further substituted (paragraph 270 and 277); preferred substituents for the triazole include naphthyl as well as monosubstituted naphthyl (paragraph 263).

Simoneau et al do not exemplify the compounds of the claimed invention, i.e., wherein Ar^1 is a disubstituted triazole substituted with a mono-, di-, or tri- substituted naphthyl; X is S; W is $\text{CH}_2\text{C}(\text{O})\text{NH}$; and Ar^2 is ortho-substituted which is optionally further substituted.

However, it would have been obvious to a person having ordinary skill in the art at the time the invention was made to select the compounds of the claimed invention from the teachings of Simoneau et al; thus arriving at the claimed invention. One skilled in the art would have been reasonably guided to substitute the naphthyl ring with one to three substituents, since said substitution is reasonably taught and suggested by Simoneau et al (e.g., see paragraphs 270 and 277), and because Simoneau et al teach that preferred substituents for the triazole ring include naphthyl as well as monosubstituted naphthyl (paragraph 263). Additionally, one skilled in the art would be reasonably guided to substitute other substituents besides o-nitro on the Ar² ring because Simoneau et al teach that phenyl substituted by o-nitro, and phenyl substituted by o-chloro and in the para position (e.g., o-chloro and p-SO₂NH₂) are all “most preferable” selections for Ar² in the compounds (see paragraph 292), and therefore one skilled in the art would be reasonably guided to select phenyl substituted in the ortho and para positions instead of the o-nitro substituted phenyl in the preferred compound taught in paragraphs 264-267 of Simoneau et al.

Response to Arguments

12. Applicant's arguments filed 3/16/09 have been fully considered but they are not persuasive for overcoming the instant rejection.

Applicants state that, with the submission of priority document PCT/US02/26816, filed August 23, 2002, applicants have perfected a priority date for the present application that is prior to that of Simoneau (which is 12/4/02).

This argument is not persuasive because Applicants cannot rely upon a claim to priority of PCT/US02/26816 to overcome this rejection, because the prior-filed application PCT/US02/26816 does not provide support for the claimed invention, for reasons stated above (see paragraph 5).

Double Patenting

13. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

14. The rejection of claims 43-46 and 48-51 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-19 of U.S. Patent No. 7,435,752 is withdrawn in view of Applicant’s Terminal Disclaimer filed 7/7/09.

15. **Claims 43-46 and 48-51 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 55 and 83 of copending Application No. 11/661,079.** Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to the same art recognized subject matter.

The claimed invention is drawn to a compound having a structure according to Formula (VI) as defined in claim 43 or the formula (A) of claim 46, wherein the variables are defined in each claim. It is noted that the scope of claim 46 falls within the scope of claim 43.

Copending application 11/661,079 claims compounds of the same formula as Formula (A) that fall within the genus of the compounds of the instant application, specifically, wherein R1 is halogen or (optionally substituted) lower alkyl, R2 is a substituted phenyl or naphthyl, R3 is halogen, methyl, or trifluoromethyl, R4 is hydrogen, and R5 is C(O)R' or S(O)2R'. Therefore, the claims are drawn to the same art recognized subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

16. **Claims 43-46 and 48-51 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 55 and 83 of copending Application No. 12/114,467.** Although the conflicting

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claims are not identical, they are not patentably distinct from each other because both sets of claims are drawn to the same art recognized subject matter.

The claimed invention is drawn to a compound having a structure according to Formula (VI) as defined in claim 43 or the formula (A) of claim 46, wherein the variables are defined in each claim. It is noted that the scope of claim 46 falls within the scope of claim 43.

Copending application 12/114,467 claims compounds of the same formula as Formula (A) that fall within the genus of the compounds of the instant application, for example, wherein R1 is optionally substituted lower alkyl or halogen, R2 is a substituted naphthyl, R3 is halogen or optionally substituted alkyl (see claim 58), R4 is hydrogen (see claim 61), and R5 is hydrogen, halogen, optionally substituted alkyl, C(O)R' or S(O)₂R' (see claim 64). Therefore, the claims are drawn to the same art recognized subject matter.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Response to Arguments

17. Applicant's arguments filed 6/17/09 have been fully considered but they are not persuasive.

Applicants state that they will consider submitting a terminal disclaimer once allowable subject matter is indicated. Since no allowable subject matter has been indicated for claims 43-46 and 48-51, the provisional rejections stand for reasons of record.

Allowable Subject Matter

18. Claim 52 is allowed.

Conclusion

19. Claims 43-46, 48-51 are rejected.

20. Claim 52 is allowed.

21. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to BARBARA FRAZIER whose telephone number is (571)270-3496. The examiner can normally be reached on Monday-Thursday 9am-4pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sharmila Landau can be reached on (571)272-0614. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BSF

/Sharmila Gollamudi Landau/
Supervisory Patent Examiner, Art Unit 1611